

1. A windscreen deflector assembly for an automotive vehicle having a
2 passenger compartment extending between opposing side walls and a rear end,
wherein the passenger compartment includes front seats and rear seats, said
4 windscreen deflector assembly comprising:
 - a flexible membrane element;
 - 6 a first cross member interconnected with an end of the membrane
element;
 - 8 a second cross member operatively coupled to the vehicle for
movement between a retracted position disposed along the rear end of the passenger
10 compartment and a use position disposed between the front and rear seats of the
passenger compartment;
 - 12 a linkage operatively coupled between the first and second cross
members so that the first cross member is carried by the second cross member during
14 movement between the retracted and use positions, whereby the first cross member in
the use position is spaced above the second cross member such that the membrane
16 element extends between the first and second cross members to form a generally
upright windscreen portion and further extends between the second cross member and
18 the rear end of the passenger compartment to form a generally horizontal cover
portion covering the rear seats of the passenger compartment.
2. A windscreen deflector assembly as set forth in claim 1, wherein the
2 first cross member includes a transversely extending beam fixedly secured to the end
of the membrane element.
3. A windscreen deflector assembly as set forth in claim 2, wherein the
2 first cross member includes side members extending from respective opposite ends of
the beam.
4. A windscreen deflector assembly as set forth in claim 3, wherein the
2 second cross member includes a transversely extending cross bar and a pair of legs
extending from respective opposite sides thereof.

5. A windscreen deflector assembly as set forth in claim 4, wherein the
2 linkage includes a pair of first and second links arranged as a four-bar link connecting
the side members of the first cross member and the legs of the second cross member.

6. A windscreen deflector assembly as set forth in claim 4, wherein a
2 portion of at least one of the side members of the first cross member and legs of the
second cross member is offset transversely to accommodate articulation of the linkage
4 as the first and second cross members are moved between the retracted and use
positions.

7. A windscreen deflector assembly as set forth in claim 5 including a rod
2 extending between one end pivotally coupled to the vehicle and an opposite end
pivotally coupled to one of the first and second links.

8. A windscreen deflector assembly as set forth in claim 4, wherein the
2 legs are pivotally coupled to the vehicle for movement of the second cross member
between the retracted and use positions.

9. A windscreen deflector assembly as set forth in claim 3, wherein each
2 side member is generally S-shaped to define an inner portion that extends
orthogonally from the beam.

10. A windscreen deflector assembly as set forth in claim 9, wherein each
2 side member is generally S-shaped to define an outer portion that is spaced
transversely from the inner portion defining a space between the side member and the
4 leg to accommodate the linkage therebetween.

11. A windscreen deflector assembly as set forth in claim 1 including a
2 spool rotatably coupled to the vehicle, the spool adapted to be fixedly secured to a
second end of the membrane element, the spool being continuously rotatably biased
4 so the membrane element is wound about the spool as the first and second cross
members are moved to the retracted position.

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12. A windscreen deflector assembly as set forth in claim 4, wherein the
2 beam and the cross bar remain substantially parallel as the first and second cross
members articulate between the retracted and use positions.

13. A windscreen deflector assembly as set forth in claim 4, wherein the
2 beam is adjacent the cross bar in the retracted position.

14. A windscreen deflector assembly for an automotive vehicle having a
2 passenger compartment including front seats and rear seats, said windscreen deflector
assembly comprising:
4 a flexible membrane element, a first cross member, and a second cross
member;
6 wherein both first and second cross members have a retracted position
with at least one of the first and second cross members disposed adjacent the rear end
8 of the passenger compartment and a use position with both first and second cross
members positioned between the front and rear seats with one of the first and second
10 cross members spaced substantially above the other of the first and second cross
members, such that in the use position the membrane element extends between the
12 first and second cross members to form a generally upright windscreen portion and
further extends between the lower of the cross members and the rear end of the
14 passenger compartment to form a generally horizontal cover portion covering the rear
seats of the passenger compartment.

15. A windscreen deflector assembly as set forth in claim 14, wherein the
2 first cross member includes a transversely extending beam fixedly secured to an end
of the membrane element.

16. A windscreen deflector assembly as set forth in claim 15, wherein the
2 first cross member includes side members extending from respective opposite ends of
the beam.

17. A windscreen deflector assembly as set forth in claim 16, wherein the
2 second cross member includes a transversely extending cross bar and a pair of legs
extending from respective opposite sides thereof.

18. A windscreen deflector assembly as set forth in claim 17, wherein the
2 linkage includes a pair of first and second links arranged as a four-bar link connecting
the side members of the first cross member and the legs of the second cross member.

19. A windscreen deflector assembly for an automotive vehicle having a
2 passenger compartment extending between opposing side walls and a rear end,
wherein the passenger compartment includes a front seat, said windscreen deflector
4 assembly comprising:
a flexible membrane element;
6 a first cross member having a transversely extending beam
interconnected with an end of the membrane element;
8 a second cross member having a transversely extending cross bar
operatively coupled to the vehicle for movement between a retracted position with the
10 cross bar disposed along the rear end of the passenger compartment and a use position
with the cross bar disposed behind the front seat of the passenger compartment;
12 a linkage operatively coupled between the first and second cross
members so that the first cross member is carried by the second cross member during
14 movement between the retracted and use positions.

20. A windscreen deflector assembly as set forth in claim 19, wherein the
2 first cross member includes generally parallel and spaced apart side members
extending substantially orthogonally from opposite ends of the transversely extending
4 beam.

21. A windscreen deflector assembly as set forth in claim 20, wherein the
2 second cross member includes generally parallel and spaced apart legs extending from
opposite ends of the transversely extending cross bar, the legs being pivotally coupled
4 to the vehicle for movement of the second cross member between the retracted and
use positions.

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22. A windscreen deflector assembly as set forth in claim 21, wherein the
2 linkage includes a pair of first and second links arranged as a four-bar link connecting
the side members of the first cross member and the legs of the second cross member.

23. A windscreen deflector assembly as set forth in claim 19, wherein the
2 cross bar in the use position is disposed between the front seat and a rear seat of the
passenger compartment.

24. A windscreen deflector assembly as set forth in claim 1 including a
2 cover operatively coupled to the vehicle for movement with the first and second cross
members between the retracted and use positions, wherein the cover in the retracted
4 position overlies the first and second cross members.